ABSTRACT

An atomization chamber apparatus used for aircraft pesticide delivery, which has an open ended walled chamber, divided into left and right sections, each having outer and inner segments, each segment having a top and a bottom wall, the outer segments having a same radius concave upper wall and a convex lower wall, while the inner segments have a same radius convex radius upper wall and a concave lower wall. A nozzle injector connectable to a fluid pesticide source is laterally disposed in an inner segment. The nozzle is chosen such that exiting pesticide will not impact the chamber walls, and the radii of the segments are chosen such that the speed of pesticide atomization by the incoming air is slowed down to reduce fines upon pesticide impact, and the speed of the pesticide air mixture on exiting the chamber is increased to substantially match the airspeed of the aircraft.